



The Wastewater Treatment Plant treats wastewater before it goes back into the Red Deer River, while meeting strict environmental standards. Although we do our part to conform to these standards – we need your help.



Thanks for helping us protect our drinking water and our environment

**For more information,
or if you have a question
or comment:**

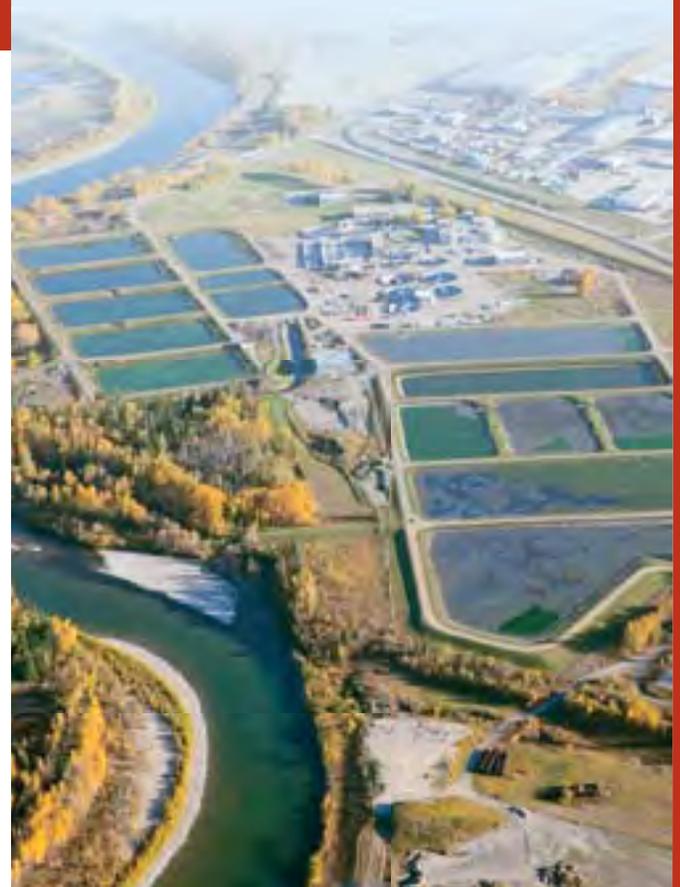
The City of Red Deer
Environmental Services department
403-342-8750
Monday to Friday 7:30 a.m. to 4:30 p.m.
environmentalservices@reddeer.ca
www.reddeer.ca



Environmental Services

Red Deer's Wastewater Treatment Plant

What we do and how you can
help us protect our water



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Red Deer's Wastewater Treatment Plant

In nature, bacteria feed on organic waste and break it down into less harmful substances. In Red Deer, sewage, or wastewater, goes to the Wastewater Treatment Plant (WWTP). At the plant, natural biological processes are accelerated and combined with physical and chemical treatment processes to remove undesirable solids and microorganisms before the water is recycled back into the Red Deer River.

Red Deer's WWTP is regulated through an approval from Alberta Environment. Samples are taken as wastewater enters and leaves the WWTP. An on-site laboratory then analyzes the samples to determine the plant's efficiency and make sure The City is meeting government regulations. This ensures strict environmental guidelines are met.



Main stages of the wastewater treatment process

1 Preliminary Treatment

Preliminary treatment removes the larger solids from the wastewater stream through a screening process.

2 Primary Treatment

Once the larger solids are removed, the wastewater is allowed to settle. The settled sludge and risen scum are pumped to other areas of the plant for further treatment.

3 Secondary Treatment

In secondary treatment, the wastewater is pumped into tanks containing bacteria that break down waste products into less harmful substances. Once this process is complete, remaining solids are removed.

In further digestion process, sludge breaks down into inert biosolids which are pumped to holding lagoons. Produced methane gas is burned in boilers to heat the digestion process. Yearly, the biosolids are spread on farmland as organic fertilizer.

4 Tertiary Treatment

The City of Red Deer is installing an ultraviolet disinfection process at the Wastewater Treatment Plant to deactivate microorganisms which remain after secondary treatment.

5 Equalization Lagoons

Red Deer's equalization lagoons provide a holding place for wastewater during high flows and power outages.



How you can help

The wastewater treatment process does not completely remove substances such as paint, petroleum products, industrial chemicals and pharmaceuticals. Never pour these items down the drain or flush them down the toilet. For more information on safe disposal of hazardous materials, see The City of Red Deer's website at www.reddeer.ca.

Water entering roadside catch basins is not treated at the WWTP. This water is discharged directly into the Red Deer River, so contaminants entering these drains will pollute the Red Deer River.

For information on wastewater treatment, see The City of Red Deer's website at www.reddeer.ca.